Appendix A. Operator PMCS

Generic Standards

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, A	Ensure that all supplies, reagents, and ancillary components necessary to operate the equipment or system are on hand.	Supplies, reagents, or ancillary components are missing.
2	B	Inspect for corrosion, rust, physically damaged parts, deteriorated materials, and damage to protective coatings.	Rust on outer surface parts determined by the Infection Control Nurse to be a health hazard.
3	B, A	Ensure the operator manual or documentation is on hand. Identify the location of such material if it is not packed with the equipment.	Operator manual is not readily available.
4	B, A	Verify that the equipment or system has no broken parts or accessories, i.e., switches, knobs, casters, plastic coverings, hoses, casings, etc.	Equipment is not functional due to broken parts.
5	B, D, A	Ensure that fluid levels, lubricants, physical limits or settings for operation are correct.	Levels are below those established in the TM or manufacturer's literature.
6	B	Verify date of last electrical safety test, PMCS, or CVC services from DA Form 2163 or other record (typically, annual inspection for patient care, laboratory and incidental use; semi-annual inspection for critical care and anesthetizing locations). If beyond designated period, arrange for CVC services.	Performance of CVC cannot be verified or CVCs are past due.
7	B, D, A	Verify operation of the equipment or system in accordance with published TMs and manufacturer's literature.	Equipment fails to operate according to TM or manufacturer's specifications.
8	B, D, A	Inspect for unusual operation, noises, leakage, or other unexpected results.	Noticeable fluid leaks or unexpected noises are detected.
9	A	Shut down equipment and clean and dry parts or components that were subjected to liquid contact.	Unit or components are not clean or dry.
10	A	Locate and store components, accessories, and operator documentation with the equipment or in appropriate location.	Items are not stored with the equipment or are not readily available.
11	B, A	Check the electrical power cord for cuts, fraying, or deterioration.	Electrical plug is missing a pin/blade or the cord insulation is cut through the outer coating.
12	B, D	Ensure that alarms and visual indicators are functioning properly.	Alarms and indicators are not functioning properly.
13	B, A	Inspect storage container for damage to case, hinges, latches, and seals.	Storage container will not latch or could leak.

4110-01-117-3902
Refrigerator, Mechanical, Blood Bank, Model BBR37-SS-1B-01

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, S	**Refrigerator**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing parts or accessories preclude operation of the refrigerator.
		b. Check the electrical power cord for cuts, fraying, or deterioration.	The power cord is cracked or frayed, wires are not covered by the cord insulation, or the damage prevents the refrigerator from operating or maintaining 36^{o} - 40^{o} F (2^{o} - 4^{o} C).
		c. Check for proper installation of the refrigerator in accordance with operating instructions.	There is insufficient clearance at the top and rear of the refrigerator that causes the compressor to overheat and the refrigerator will not maintain 36^{o} - 40^{o} F (2^{o} - 4^{o} C).
		d. Perform “Start-up” procedures in accordance with operating instructions.	Refrigerator fails to start-up.
2	B, S	**Monitor**	
		a. Check for broken, worn, or damaged switches, indicators, and displays on the control panel. Ensure the 9-volt standby battery (located on top of the monitor module rear protective/dust cover) is operational.	The monitor does not operate.
		b. Perform “Start-up” Procedures in accordance with operating instructions.	Monitor fails to start-up.
		c. Perform the “Surveillance Module” check out procedure in accordance with operating instructions.	Monitor does not display upper or lower solution temperatures.
		d. Perform the monitor check out procedure in accordance with operating instructions.	Safe lamp does not illuminate. Failure lamp and alarm do not operate when the BATTERY TEST switch is actuated.
		e. Perform “Door Position” check out procedure in accordance with operating instructions.	Alarm is not heard within 3 minutes +/- 30 seconds when door is held open continuously.
3	B, A, S	**Doors**	
		a. Verify that the doors close and seal properly.	Defective door gasket prevents refrigerator from operating or maintaining 36^{o} - 40^{o} F (2^{o} - 4^{o} C).
		b. Inspect the door hinges for loose or missing hardware.	Loose or missing hardware prevents refrigerator from operating or maintaining 36^{o} - 40^{o} F (2^{o} - 4^{o} C).

(continued) Appendix A. Operator PMCS

4110-01-117-3902
Refrigerator, Mechanical, Blood Bank, Model BBR37-SS-1B-01

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
4	B, S	**Drawers** Ensure that the drawers are unobstructed and move freely. Inspect for dirt and other foreign substances.	Obstructed or damaged drawers prevent refrigerator doors from sealing.
5	B, S	**Temperature Recorder** Verify the operation of the temperature recorder.	Pen or temperature recorder is defective.
6	S	**Condensing Unit** Inspect condenser and condenser fan for damage and dust.	Refrigerator does not operate or maintain 36^{o} - 40^{o} F (2^{o} - 4^{o} C).
7	D	**Equipment Care** Ensure “Equipment Care” is conducted as directed by the manufacturer’s literature.	

4110-01-159-6922

Refrigerator, Mechanical, Blood Bank, Model 139875

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	S	**Refrigerator** a. Ensure that a copy of the manufacturer's manual is on hand.	
		b. Inspect components, power cord, door gasket, etc. for damage, discoloration, and excessive wear.	The power cord is cracked, frayed or wires are not covered by the cord insulation.
2	B	**Installation and Operation** a. Installation of the refrigerator is conducted as directed by the manufacturer's literature.	
		b. Use the two leveling screws behind the base grille, on the front of the unit, to level the refrigerator.	
		c. Verify temperature of the refrigerator and freezer. Adjust temperature of refrigerator (lower section), allowing 24 hours for the temperature to settle before adjusting freezer section.	The refrigerator or freezer does not maintain set temperature.
		d. Select the mode of operation for the freezer, either manual defrost or "frost free."	
		CAUTION: NEVER CHANGE THE MODE FROM AUTOMATIC TO MANUAL WHEN THE EVAPORATOR FAN IS NOT RUNNING. EVAPORATOR FAN OPERATION CAN BE HEARD BY OPENING THE FREEZER DOOR.	
		e. Ensure that the power cord of this instrument is equipped with a three-prong (grounding) plug which mates with a three-prong (grounding) wall receptacle. Do not use a two-prong adapter plug.	The grounding prong is missing from the plug.
3	B, D	**Maintaining refrigerator** a. Verify the temperature is maintained.	The refrigerator or freezer will not maintain set temperatures.
		b. Defrost the freezer when frost becomes ¼" to ½" thick or thicker in any area of the refrigerator.	
		c. Cabinet cleaning	
		(1) The interior should be cleaned frequently as directed by the manufacturer's literature.	
		(2) The exterior of the cabinet should be cleaned occasionally as directed by the manufacturer's literature.	

(continued) Appendix A. Operator PMCS

4110-01-287-7111
Refrigerator, Solid State, Biological, Model DLA-50T

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1		**Refrigerator, Solid State, Biological**	
	B, A	a. Conduct an inventory to ensure that the components and accessories listed on the Parts and Accessories List are on hand.	
	B	b. Inspect the unit for dust, dirt, or damage. Inspect power cord for cracks or tears.	The power cord is cracked, frayed, or wires are not covered by the cord insulation.
	B	c. Verify that the door seal is serviceable.	The door does not seal.
	B	d. Verify that the door cover closes and latches properly.	The door cover does not close.
	B	e. Assemble the refrigerator power interconnections as directed in the manufacturer's literature. Ensure that the power source is correct.	
	B, S	f. Install the "Alarm Battery Pack" and test the "Alarm/Battery System" as directed in the manufacturer's literature.	The alarm red light does not blink or the sound signal will not beep.
	B	g. Start the operation of the refrigerator as directed in the manufacturer's literature.	The refrigerator cannot be started.
	B	h. Clean the refrigerator as directed in the manufacturer's literature.	
	A	i. Store the refrigerator as directed in the manufacturer's literature.	

4110-01-287-7111
Refrigerator, Solid State, Biological, Model RCB42P

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1		**Refrigerator, Solid State, Biological**	
	B, A	a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components preclude operation of the refrigerator.
	B	b. Inspect the unit for dust, dirt, or damage. Inspect power cord for cracks or tears.	Damage or deteriorated components prevent the operation of the unit, the power cord is cracked or frayed, or wires are not covered by the cord insulation.
	B	c. Assemble the refrigerator power interconnections as directed in the manufacturer's literature. Ensure the proper power source is correct.	The proper power connectors cannot be used.
	B	d. Verify that the hinges and catches are tightly fixed.	The hinges and/or catches are not functional.
	B	e. Verify that the lid seals.	The lid does not seal.
	B	f. Clean the refrigerator as directed in the manufacturer's literature.	
2	B	**DC – AC Operation**	
		Conduct the operating procedures as directed by the operator's manual.	The refrigerator cannot be started.

(continued) Appendix A. Operator PMCS

4110-01-352-3653

Refrigerator, Mechanical, Blood Bank, Model FT2TRBLB

[B-Before Operation, D-During Operation, A-After Operation, W-weekly, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**Refrigerator** a. Ensure that a copy of the manufacturer's manual is on hand.	
		b. Inspect components for damage, discoloration, or excessively worn components.	The power cord is cracked or frayed or wires are not covered by the cord insulation.
2		**Operating and Maintaining the Refrigerator**	
	B	a. Ensure that a three-prong grounding plug is being used in an appropriate electrical outlet as directed by the manufacturer's literature.	Grounding prong is missing from plug.
	B	b. Ensure that the interior of the refrigerator has reached the set temperature and that the compressor has cycled at least three times before loading product into the cabinet.	The compressor fails to cycle or the refrigerator does not reach the required temperature.
	W	c. Clean the refrigerator as directed by the manufacturer's literature. Be sure the interior of the cabinet is cleaned with mild soap and rinsed with a warm baking soda solution. Dry thoroughly. **NOTE: Failure to dry thoroughly may result in the formation of mildew.**	

6515-01-185-8446
Anesthesia Apparatus, Nitrous Oxide, Model 885A

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**Anesthesia Unit**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent safe operation of the anesthesia unit.
		b. Inspect the components for damage, discoloration, or excessively worn parts.	Unserviceable components prevent use of the anesthesia unit.
		c. Verify the date on the Medical Equipment Verification/Certification sticker (DD Form 2163) is current.	The unit has not been verified within six months.
2		**Anesthesia Unit Operational Test**	
	B	a. Set up equipment as directed by the manufacturer's literature.	
	B	b. Inspect the lower case and control headstand for damage.	Damage to lower case or headstand prevents safe operation of the unit.
	B	c. Verify proper operation of the non-adjustable relief valve as stated in the manufacturer’s literature.	The non-adjustable relief valve does not open before the gauge needle reaches approximately 80 mm Hg.
	B	d. Verify proper operation of the breathing circuit pressure gauge as directed in the manufacturer’s literature.	The breathing circuit pressure gauge will not rest at zero +/- 1 mm Hg.
	B	e. Verify Leak Test Procedure Number 1 as directed in the manufacturer’s literature.	There is a leak greater than 100psi after five minutes for small cylinders or seven minutes for large cylinders
	B	f. Verify Leak Test Procedure Number 2 as directed in the manufacturer’s literature.	There is any flow of gas on any of the flow meters.
	B	g. Verify Leak Test Procedure Number 3A as directed in the manufacturer’s literature.	The pressure on the breathing circuit pressure gauge does not rise to more than 35 mm Hg.
	B	h. Verify Leak Test Procedure Number 3B as directed in the manufacturer’s literature.	The pressure on the breathing circuit pressure gauge does not rise to more than 35 mm Hg.
	B	i. Verify the proper operation of the scavenger valve as directed in the manufacturer’s literature.	The pressure on the breathing pressure gauge exceeds 3 mm Hg.
	B	j. Verify proper vaporizer operation as directed in the manufacturer’s literature.	The vaporizer fails any test in the vaporizer checkout procedure.

(continued) Appendix A. Operator PMCS

6515-01-185-8446
Anesthesia Apparatus, Nitrous Oxide, Model 885A

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
	B	k. Verify the preoperative checkout procedure as directed in the manufacturer's literature.	The anesthesia apparatus fails any test in the preoperative checkout procedure.
	B	l. Determine the effectiveness of the soda lime as directed by the manufacturer's literature.	The effectiveness of the soda lime is exhausted.
	A	m. Drain and clean the absorber system as directed in the manufacturer's literature.	The absorber cannot be drained and cleaned.
	A	n. Drain the anesthetic agent from the vaporizer.	The vaporizer cannot be completely drained.
3	B	**Oxygen Monitor Operational Test.**	
		Perform the preoperative checkout procedure as directed in the manufacturer's literature.	The oxygen monitor does not pass all the tests in the preoperative checkout procedure.

6515-01-291-1199
Defibrillator ECG Monitor/Recorder, Model HP 43110MC

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, A	**Defibrillator & Monitor/Recorder Module**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	There are no patient cables, electrodes, recorder paper, or other items, which preclude safe operation.
		b. Inspect case, cables and connectors for damage. Inspect infrared (IR) link on outer case of defibrillator and monitor/recorder modules for cleanliness and damage.	Damaged or non-operational components preclude defibrillator, monitor, or recorder from operating safely.
		c. Inspect defibrillator paddles for cleanliness and deep pits.	The paddles are dirty or pitted.
		d. Verify that the Medical Equipment Verification/Certification sticker (DD Form 2163) has a current date (within six months).	The unit has not been verified within the last six months.
		e. Verify that the Defibrillator Energy Output Certificate (DA Label 175) has a current date (within six months).	The output has not been verified within the last six months.
2	B	**Monitor/Recorder Module Check Out**	
		a. Verify the function of the monitor controls as directed in the manufacturer's literature: (1) "Power On" key (2) "Power Off/Recharge" key (3) "ECG Source Lead Select" key (4) "ECG Source Paddles" key (5) "Alarms On/Off" key (6) "Alarms Off" indicator (7) "Select" key (8) "Beeper Volume" indicator (9) "ECG Size" indicator (10) "Hi Alarm Limit" indicator (11) "Low Alarm Limit" indicator (12) "Up Arrow" key (13) "Down Arrow" key (14) "Battery Charge" indicator	Any of the indicators fails to perform to manufacturer's specifications.

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(15) “Low Battery” indicator	
		b. Verify the function of the following CRT screen messages as directed in the manufacturer’s literature:	Any of the indicators fails to perform to manufacturer’s specifications.
		(1) “ECG Source” indicator	
		(2) “Heart” indicator	
		(3) “Sync Marker” indicator	
		(4) “ERROR xx”	
		(5) “Low Battery”	
		(6) “Low Paper”	
		(7) “No Defib”	
		(8) “No Paper”	
		(9) “Play Alarm”	
		(10) “Play Begin”	
		(11) “Play End”	
		(12) “Play-Back”	
		(13) “Ready”	
		(14) “Record”	
		(15) “Stop”	
		(16) “Sync”	
		(17) “Sync Lost”	
		(18) “Use Leads”	.
		c. Verify the function of the following ECG memory controls as directed in the manufacturer’s literature:	Any of the indicators fails to perform to manufacturer’s specifications.
		(1) “Mode” key	
		(2) “REC” indicator	
		(3) “Stop” indicator	
		(4) “Play” indicator	
		(5) “Set” indicator	
		(6) “ECG Memory Bar-graph” indicator	
		(7) “Left Arrow” key	
		(8) “Right Arrow” key	

6515-01-291-1199
Defibrillator ECG Monitor/Recorder, Model HP 43110MC

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		d. Verify the function of the following recorder controls as directed in the manufacturer's literature: (1) "Run/Stop" key (2) "1mV CAL" key	Any of the indicators fails to perform to manufacturer's specifications.
		e. Verify the function of the following strip-chart recorder messages as directed in the manufacturer's literature: (1) "Sync Marker" indicator (2) "Autogain xxx mm/mV" (3) "Charge" (4) "Disarm" (5) "Lead xxx" (6) "Paddles" (7) "Playback" (8) "Sync" (9) "xxx mm/mV"	Any of the indicators fails to perform to manufacturer's specifications.
		f. Perform the monitor/recorder module checks as directed in the manufacturer's literature.	The monitor/recorder module fails to perform to manufacturer's specifications.
		g. Clean the recorder print head as directed in the manufacturer's literature.	
3	B	**Defibrillator Module Check Out**	
		a. Verify the function of the following panel controls as directed in the manufacturer's literature: (1) "Power On/Disarm" key (2) "Power Off/Recharge" key (3) "Energy Select/Charge" keys (4) "Sync" keys (5) "Energy-Joules" display (6) "Low Battery" indicator (7) "Battery Charge" indicator (8) "Sync" indicator	The defibrillator module fails to perform to manufacturer's specifications.

(continued) Appendix A. Operator PMCS

6515-01-291-1199
Defibrillator ECG Monitor/Recorder, Model HP 43110MC

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(9) “Test” indicator	
		b. Verify the function of the following paddle controls as directed in the manufacturer’s literature:	The defibrillator module fails to perform to manufacturer’s specifications.
		(1) “Charge” button	
		(2) “Discharge” button	
		(3) “Charge Done” indicator	
		(4) “Adult Electrode Release”	
		c. Perform the defibrillator module checks as directed in the manufacturer’s literature.	The defibrillator module fails to perform to manufacturer’s specifications.
		d. Clean the exterior of the defibrillator/monitor recorder as directed in the manufacturer’s literature.	The defibrillator/monitor is not properly cleaned.
4	B, A	**“Every Shift” and “Every Week” Procedures**	
		Perform the “Every Shift” and “Every Week” procedures as outlined in the manufacturer’s literature.	The defibrillator module or monitor recorder module fails to perform to manufacturer’s specifications.

6515-01-453-4003
Defibrillator ECG Monitor/Recorder, LIFEPAK 10

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, A	**Defibrillator**	
		a. Conduct inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	FASTPAK batteries (unless AC auxiliary power module is in use) or ECG 3-lead cable are missing or damaged.
		b. Inspect case, cables, and connectors for function.	Damaged or inoperative components preclude operation.
		c. Inspect defibrillator paddles for cleanliness and deep pits.	Paddles are dirty or pitted.
		d. Verify that the Medical Equipment Verification/Certification sticker (DD Form 2163) and the Defibrillator Energy Output Certificate (DA label 175) have current dates.	The defibrillator or the defibrillator output has not been verified within the last six months.
2	B	**Testing**	
		a. Monitor/Recorder	
		Conduct the testing procedures as directed by the Operating Instructions.	Any of the monitor/recorder test procedures fail.
		b. Defibrillator	
		Conduct the testing procedures as directed by the Operating Instructions.	Any of the defibrillator test procedures fail.
		c. Synchronizer Function	
		Conduct the testing procedures as directed by the Operating Instructions.	Any of the synchronizer function test procedures fail.
		d. Quik-Pace Noninvasive Pacemaker	
		(1) Conduct the testing procedures as directed by the Operating Instructions.	Any of the “Quik-Pace” noninvasive pacemaker test procedures fail.
		(2) Inspect and test the pacing cable as directed by the Operating Instructions.	Any discrepancy is detected.
		e. Fast-Patch Adapter	
		(1) Conduct the testing procedures using “Quick Test Cable Tester” as directed by the Operating Instructions.	Any of the Fast-Patch adapter test procedures fail.

6515-01-453-4003
Defibrillator ECG Monitor/Recorder, LIFEPAK 10

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(2) Conduct the testing procedures using patient simulator as directed by the Operating Instructions.	Any of the Fast-Patch adapter test procedures fail.
		f. 12 Lead ECG Adapter	
		Conduct the testing procedures as directed by the Operating Instructions	Any of the 12 lead ECG adapter test procedures fail.
3	Q	**Nickel-Cadmium Battery Maintenance**	
		a. Perform ”Battery Reconditioning” test in accordance with Operating Instructions.	The battery capacity is less than 80% after the third discharge.
		b. Perform “Battery Shelf Life” test in accordance with Operating Instructions.	The battery capacity is less than 80% after the third discharge or the battery has more than 20% difference between the third and forth discharge.
4	S	**Case**	
		a. Inspect for cracks, major dents, or puncture holes.	
		b. Verify that the door cover closes and latches properly.	

6520-00-139-1246
Compressor Dehydrator, Dental, M5 Series

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**Compressor-Dehydrator**	
		a. Conduct an inventory to ensure that the items listed in the Equipment Parts and Accessories List are on hand.	Missing hose assembly, which connects compressor to dental operating and treatment unit.
		b. Inspect the unit for any damaged or deteriorated hoses, tubes, cables, and other components.	Damaged or deteriorated components prevent operation of the unit.
		c. Inspect the unit for an excessive accumulation of dust or dirt. (Particular attention should be given to the intake silencer and fan guard.)	Unit overheats or does not operate.
2	B	**Installation and Preparation for Use**	
		a. Conduct the installation procedure.	
		b. Conduct the “Preparation for Use” procedure.	
		(1) Remove transit case from shipping carton.	
		(2) Unscrew pressure relief valve on transit case cover, release the 8 latches and remove transit cover.	
		(3) Check pressure gauge to be sure storage tank is not pressurized. If pressurized, release pressure by opening drain valve.	
		(4) Be sure tank drain valve is closed and set circuit breaker to “OFF.”	
		(5) Attach appropriate length of interconnecting hose from compressor to operating and treatment unit.	The interconnecting hose cannot be attached.
		(6) Connect power cable to 115 Volt, 60 Hz power source.	
		c. Conduct the operational checkout procedure.	
		CAUTION: DO NOT RESTRICT AIRFLOW THROUGH AIR INTAKE SILENCER.	
		NOTE: Do not draw any air from the compressor during the operational checkout procedure.	
		(1) While depressing red manual unloader tab on pressure switch, set ON-OFF circuit breaker to “ON.” Compressor motor and dryer cooling fan will energize.	The motor and fan do not energize.

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(2) Observe pressure gauge. Pressure should increase to 80psi in approximately 40 seconds. Compressor should stop, but cooling fan will continue to run.	The compressor does not stop.
		(3) Pressure should decrease to 60psi in approximately 31 seconds. During this time a hissing sound should be heard as purged air is discharged through the exhaust muffler indicating that the regeneration system is operating properly.	
		(4) When pressure decreases to 60psi compressor should start and run for approximately 8 seconds while pressure again increases to 80psi.	The compressor does not start.
		(5) At 80psi, compressor stops and cycle should repeat, (3) and (4) above.	The compressor does not stop or if the compressor does not start.
		(6) Check color of dryness indicator. If “blue,” compressor is ready for operation. If not “blue,” drying system should be regenerated before using compressor.	The humidity indicator is other than blue.
		(7) Rotate four transit cover supports so that they overlap edges of transit case at right angles. Place transit case on supports.	
3	B	**Air Storage Tank**	
		a. Verify that the tank does not leak by pushing the power switch to the “OFF” position and observing that the pressure holds at approximately 60psi for several minutes.	The tank cannot be pressurized or the tank leaks.
		b. Ensure that the hose(s) can be properly connected.	The hose(s) cannot be connected to the storage tank.
		c. Ensure pressure relief/drain valve opens and closes properly.	The valve cannot be opened or it leaks when closed.
4	S	**Case**	
		a. Inspect the case for signs of excessive wear.	The case cannot be used to store or ship the unit.
		b. Check the air relief valve.	The valve is inoperable, damaged, or missing.

6520-00-139-1246
Compressor Dehydrator, Dental, M5 Series

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
5	B, D, A	**Pressure Gauge**	
		Check for dents, a cracked or broken dial cover, or gauge indications beyond the normal range.	The damage prevents operation of the unit.
6	B, D, A	**Humidity Indicator**	
		a. Inspect for dents, a cracked or missing indicator cover, or the lack of any color indication.	The damaged indicator prevents operation of the unit.
		b. Ensure that the indicator is blue.	The humidity indicator is other than blue.

(continued) Appendix A. Operator PMCS

6520-01-272-4531
Dental Operating Unit, ADEC Model 3406 Porta-Cart

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, A	**Dental Unit**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent operation of the dental unit.
		b. Inspect components for damage, discoloration, or excessively worn components.	Unserviceable components prevent the use of the dental unit.
2	B	**Dental Unit Operational Test**	
		a. Ensure the unit is assembled by performing the equipment setup procedure as directed by the manufacturer's literature.	Missing components prevent the assembly of the unit.
		b. Verify the function of the controls according to the manufacturer's literature.	Broken controls prevent effective patient care.
		c. Prepare the dental unit for use according to the manufacturer's literature.	The dental unit does not maintain air pressure between 60 psi to 80 psi or water pressure between 30 psi to 40 psi.
		d. Verify the function of the syringe according to the manufacturer's literature.	The syringe does not pass water and/or air.
		e. Verify the function of the air vacuum system according to the manufacturer's literature.	The air vacuum system does not create sufficient vacuum.
		f. Verify the function of the water tank according to the manufacturer's literature.	The water tank cannot be pressurized.
3	B	**Dental Handpieces**	
		a. Adjust the maximum dynamic air pressure according to the handpiece manufacturer's literature.	The maximum dynamic air pressure cannot be reached for the particular manufacturer's handpiece.
		b. Adjust the water coolant flow according to the manufacturer's literature.	The handpiece coolant water cannot be adjusted.
4	A	**Dental Unit Care**	
		After each patient, clean and disinfect all surfaces to include the air vacuum system.	
5	A	**Dental Unit Shut Down**	
		Perform the "System Shut-Down" according to the manufacturer's literature.	

6520-01-272-4531
Dental Operating Unit, ADEC Model 3406 Porta-Cart

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
6	A	**Dental Unit Storage and Transportation** a. Prepare the unit for storage or transportation according to the manufacturer's literature. b. Repack the unit according to the manufacturer's literature.	
7	B, A	**Storage Case** Inspect the storage case for cracks, dents, or broken latches.	

(continued) Appendix A. Operator PMCS

6520-01-333-5961
Operating and Treatment Unit, Dental, Model FUS336

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**Dental Unit**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories list are on hand.	Missing components prevent the operation of the dental unit.
		b. Inspect components for damage, discoloration, or excessively worn components.	Unserviceable components prevent the use of the dental unit.
2	B	**Dental Unit Operational Test**	
		a. Ensure the unit is assembled by performing the unpacking and assembly procedures in the manufacturer’s literature.	The unit cannot be assembled.
		b. Verify the control functions according to the manufacturer’s literature.	Unserviceable controls prevent operation of the unit.
		c. Prepare the dental unit for use according to the manufacturer’s literature.	The dental unit does not maintain air pressure between 60 psi to 80 psi or water pressure between 30 psi to 40 psi.
		d. Verify the function of the syringe according to the manufacturer’s literature.	The syringe does not pass water and air.
		e. Verify the function of the water tank according to the manufacturer's literature.	The water tank cannot be pressurized.
		f. Verify the function of the air vacuum system according to manufacturer's literature.	The air vacuum system does not create vacuum.
3	B, A	**Care of Unit**	
		a. Clean the surface of the unit as directed by the manufacturer's literature.	
		b. Disinfect unit as directed by the manufacturer's literature.	
		c. Clean the air vacuum system as directed by the manufacturer's literature.	
		d. Sterilize instruments as directed by manufacturer's literature.	
5	B, A	**Storage Case**	
		Inspect the storage case for cracks, dents, or broken latches.	Damage to the storage case prevents storage or transport of the dental unit.

(continued) Appendix A. Operator PMCS

6520-01-398-4613
Compressor Dehydrator, Dental, Model PAC 6.7

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, D	**Compressor Dehydrator**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing interconnecting air hoses, with appropriate connectors, which connect compressor to dental operating and treatment unit.
		b. Inspect the unit for any damaged or deteriorated hoses, tubes, cables, and other components.	Damaged or deteriorated components prevent operation of the unit.
		c. Inspect the unit for an excessive accumulation of dust or dirt. Ensure intake filter elements are clean and serviceable.	Intake filter elements are unserviceable.
		d. Inspect muffler on the water separator for serviceability.	
2	B, D	**Operational Checkout**	The unit fails to operate.
		a. Observe the pressure gauge.	Pressure does not increase to 80psi in approximately 40 seconds.
		b. Observe that the unloader valve switches and compressor vents to atmosphere.	The unloader valve does not switch or the pressure does not decrease to 60 psi.
		c. Observe that when pressure decreases to 60 psi the unloader valve switches back and compressor pumps for approximately 8 seconds to reach 80 psi.	The unloader valve does not switch or the pressure does not reach 80psi.
		d. Observe that the cycle repeats.	The cycle does not repeat.
		e. Verify that the dryness indicator is blue.	The dryness indicator is other than blue.
		f. Rotate the four transit cover supports. Place transit case cover on supports.	
3	B, D	**Air Storage Tank**	
		a. Inspect air tank for leaks, damage, or excessive rust.	Air tank leaks or damage or rust accumulation precludes operation.
		b. Inspect hoses and ensure that the hoses(s) can be properly connected.	The hose(s) cannot be connected to the storage tank.
		c. Ensure pressure relief/drain valve opens and closes properly.	The valve cannot be opened or it leaks when closed.
4	B, D, A	**Pressure Gauge**	
		Check for dents, a cracked or broken dial cover, or gauge indications beyond the normal range.	The pressure gauge does not function.

(continued) Appendix A. Operator PMCS

6520-01-398-4613
Compressor Dehydrator, Dental, Model PAC 6.7

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
5	B, D, A	**Dryness Indicator**	
		a. Inspect for dents, a cracked or missing indicator cover, or the lack of any color indication.	The damaged indicator prevents operation of the unit.
		b. Ensure that the indicator is blue.	The dryness indicator is other than blue.
6	S	**Case**	
		a. Inspect the case for signs of excessive wear.	
		b. Check the air relief valve.	

6525-01-099-2320
X-Ray Apparatus Field Dental, Model D3152

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**X-Ray Apparatus Field Dental**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent the operation of the dental unit.
		b. Assemble unit according to manufacturer's literature.	The unit cannot be assembled correctly.
		c. Inspect unit for damage. Inspect for tightness, rust, cracks, wear, fraying electrical cords, and cleanliness.	The damage prevents the operation of the unit.
		d. Check for tube head drift in all working positions.	Tube drift cannot be corrected by leveling the unit.
		e. Verify that the Medical Equipment Verification/Certification sticker (DD Form 2163) has a current date.	The unit has not been verified within the last 12 months.
2	B	**Operational Check Out**	
		Perform "Line Adequacy Test" in accordance with manufacturer's literature.	The unit fails to perform.
3	A	**Repacking**	
		Disconnect unit from power and repack according to manufacturer's literature.	Unit is damaged or cannot be repacked.
4	B, A	**Case**	
		a. Inspect the case for signs of excessive wear.	The case cannot be used to store or ship the unit.
		b. Inspect gasket for damage or deterioration.	Gasket is not serviceable.

(continued) Appendix A. Operator PMCS

6525-01-303-6235

X-Ray Process Machine, Model AFP14X3MIL

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1		**X-Ray Processor**	
	B	a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent the operation of the processor.
	B	b. Inspect the processor for obvious signs of damage such as cracks, dents, leaks or broken components.	The damage prevents operation of the processor.
	B, D	c. Perform the “Periodic Maintenance Checks” as directed in the manufacturer’s literature. (1) Weekly (2) Monthly	The processor does not meet the “Periodic Maintenance Checks.”
	B	d. Conduct the “Algae Control” procedure as directed in the manufacturer’s literature.	
	B	e. Conduct the ”Whenever Chemistry is Changed” procedure as directed in the manufacturer’s literature.	The solutions are contaminated.
	B	f. Lubricate the processor as directed in the manufacturer’s literature. (1) Weekly (2) Monthly (3) Quarterly (4) Semiannually (5) Every five years	The processor does not operate.

6525-01-312-6411

X-Ray Apparatus, Radiographic/Fluoroscopic, Model CS-8952

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, A	**X-Ray Apparatus**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components prevent the use of the unit.
		b. Inspect unit for physical damage, rust, or excessively worn components.	Unserviceable components prevent the use of the unit.
		c. Verify that the Verification/Certification sticker (DD Form 2163) has a current date.	The x-ray apparatus has not been verified within the last 12 months.
2	B, A	**X-Ray Operational Test**	
		a. Perform daily pre-operational system check as directed by manufacture's literature.	
		NOTE: Ensure that personal protective apron, lead blockers, and suitable radiation protection measures are taken.	
		(1) Turn power on and adjust line set as needed.	The line adjustment cannot be accomplished.
		(2) Perform table check.	There are any malfunctions or unusual noises.
		(a) Press and hold the longitudinal switch on spot film device (SFD) until the tabletop reaches its limit of travel.	The tabletop does not move approximately 30" from its center position before it stops.
		(b) Press and hold the table longitudinal foot switch until the tabletop reaches its limit of travel.	The tabletop does not move approximately 30" from its center position before it stops.
		(c) Press and hold the table center switch until the tabletop stops.	The tabletop does not move to its center position from either of the above mentioned longitudinal positions, before stopping.
		(d) Press and hold the Trendelenburg tilt switch until the table reaches its maximum tilt and stops.	The table does not reach its maximum 12 degrees before stopping.
		(e) Press and hold the vertical tilt switch. The table should stop at the horizontal position. Release the switch, and press and hold the switch again. The table should rotate to its maximum tilt of 88 degrees, proving the tabletop is on "center."	The table does not reach center or if it does not rotate to 88 degrees.

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(f) Press and hold the Trendelenburg tilt switch until the table stops at horizontal. Release the switch.	The table does not reach horizontal position.
		(g) On the spot film device, disengage the carriage locks and the compression locks and move the spot film device in all directions.	The device requires more than 20 pounds of force to move it.
		(3) Perform the tube stand check	
		(a) Verify that the tube stand is energized by operating the locks and moving it through its various motions.	The locks do not work or if the tube stand cannot be moved into various positions.
		(b) Check the collimator to ensure that all lamps will light.	All lamps do not energize.
		(4) Perform the spot film device (SFD) check.	
		(a) Observe the spot film device for the presence of power. All push buttons should be lit.	The buttons are not lit.
		(b) Insert an empty 9” x 9” cassette into the SFD tunnel. Cycle the cassette carriage by pressing the PARK/LOAD switch. The carriage should alternate between its park and load positions.	The carriage does not alternate between park and load positions.
		(c) Verify that various pictorial representations can be set on the display (i.e., 2 on 1, 3 on 1, and 9 on 1).	The display does not indicate the correct selection or the cassette is not motor powered into the correct position.
		(5) Perform the warm-up procedure.	
		NOTE: Always perform the warm-up procedure no more than one hour before the first case of the day or if the system has been idle for one hour or longer.	
		(a) Warm up the over-table tube.	
		[1] Disable autotiming and close the collimator blades. Select 70 kVp, 100 mA, 1.0 second.	The selections cannot be made.
		[2] Warm up the over-table x-ray tube by making four (4) exposures at 15-second intervals.	The unit will not make the exposures.
		(b) Make a fluoroscopic exposure by performing the following steps:	Fluoroscopic exposures cannot be made.

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		[1] Press the 200L SPOT push button switch on the generator front panel.	
		[2] On the fluoroscopic controls section of the generator panel, select mA station B and rotate the “minutes” dial to the 5 (minute) position.	
		[3] Rotate the fluoroscopic kVp control until 70 kV is indicated on the fluoroscopic kVp meter. Ensure that the spot film device cassette carriage is in the park position.	
		[4] Place a suitable fluoroscopic kVp phantom on the tabletop in the in-beam position.	
		[5] Depress either the footswitch or x-ray push button on the spot film device.	
		[6] Observe the imaging system mirror. A sharp, clear x-ray image of the grid chamber mechanism should be displayed.	The unit does not produce a clear image.
		NOTE: Under-table (UT) shutters must always be visible and mechanically coned down as necessary.	
		[7] Place a 9” x 9” cassette into the SFD. (This should activate the system to make radiographic exposure). Locate the footswitch behind the operator barrier. Select an under table (UT) exposure of 70 kVp, 0.1 second. Depress footswitch, make fluoro exposure. From SFD location, make radiographic exposure.	The system will not transition from “fluoro” imaging to radiographic mode, with actual radiographic exposure.
		[8] Repeat above procedure with “Autotiming” set “ON.” Select “Table” and “Normal density.” Set radiographic exposure to about 50% more time than expected.	The system will not transition from “fluoro” mode to radiographic mode with exposure.
		NOTE: Phototiming failure does not deadline the system, but does reduce overall capability.	
		b. Clean x-ray unit as directed by the manufacturer’s literature.	

(continued) Appendix A. Operator PMCS

6525-01-325-3740

Portable X-Ray System, Model 1200

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**X-Ray System**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components prevent the use of the x-ray apparatus.
		b. Inspect unit for damage, discoloration, or excessively worn components.	Unserviceable components prevent the use of the x-ray apparatus.
		c. Verify that the Medical Equipment Verification/Certification sticker (DD Form 2163) has a current date.	The unit has not been verified within the last 12 months.
2	B	**X-Ray Operational Test**	
		a. Perform the “Assembly/Setup Procedure” as directed by the manufacturer’s literature.	The unit cannot be set up.
		(1) Remove reusable storage container from the wooden shipping crate, release leg clips.	
		(2) Open the reusable container.	
		(3) Remove the stand frame assembly, position on floor, engage rear wheel brakes, fold out legs and insert locking pins to frame/leg holes to lock legs.	
		(4) Remove the pipe assembly, lower section, and position locking handles down (to the horizontal unlocked position).	
		(5) Position the pipe assembly, lower section, with the gear rack toward the rear of the stand. Align the four "T" head bolts on the bottom of the pipe assembly, lower section with the four key-slots on the stand frame assembly. Lower into place, being sure the "T" bolts fit into the key-slots.	
		(6) Slide the pipe assembly, lower section, forward (approximately 1 inch) and lift, the two locking handles up (to the vertical locking position). Ensure that both locking clips fit into locking clip slots.	
		(7) Remove pipe assembly, upper section, from the reusable container.	
		(8) Position pipe assembly, upper section, locking handle to the up (unlocked) position.	
		(9) Position the pipe assembly, upper section, on top of the pipe assembly, lower section, with the rack gear facing the rear of the stand.	

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(10) Pull locking handle down (from the unlocked position) to the perpendicular position and rotate 90 degrees to the lock position, secure locking handle with spring clip. (11) Crank gearbox assembly up to a comfortable working height. (12) Remove cross arm assembly from side of stand frame assembly. (13) Press cross arm horizontal travel release brake and slide cross arm into gearbox assembly. (14) Lift x-ray generator assembly out of reusable container, remove safety pin, position x-ray generator yoke assembly into end of cross arm assembly, secure safety pin. (15) Lift control assembly out of reusable container. Position the control arm assembly on the stand bracket pull out on the end clips, and snap in to place. (16) Attach line cord to control assembly “LINE IN” connector, attach exposure switch cable to control assembly, “HAND SWITCH” connector and connect one end of the interconnect cable to the control assembly “LINE OUT” connector and the remaining end to the x-ray generator assembly connector. b. Verify the “Assembly Check Out” procedure as directed by the manufacturer's literature. (1) Verify that the stand foldout leg locks pins are installed. (2) Verify that the pipe assembly lower section locking handles are in the up position and that the handle locking clips are engaged. (3) Verify that pipe assembly upper section locking handle is in the locked position and the spring clip is engaged. (4) Verify that the x-ray generator safety pin is installed and locked. (5) Verify that the line cord, the exposure switch and the interconnect cable are properly installed.	The assembly cannot be accomplished.

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		c. Perform pre-operational checkout procedures as directed by the manufacturer's literature. (1) Check power cord, and all interconnecting cables. (2) Verify that the 50/60 Hz switch is set correctly. (3) Turn on power switch; verify the correct line set. (4) Close the collimator shutters. (5) Select the 60kVp/40mA station. (6) Set timer for 0.1 seconds. (7) Step back from the unit with the exposure switch. (8) Press the exposure switch to the first position; verify the ready lamp goes off and on after about a one second delay. (9) Press for second trigger position; verify the x-ray on lamp and audio tone operate.	The checkout cannot be accomplished.
3	B, A	**Periodic Maintenance** a. Perform Operator Maintenance as directed by manufacture's literature. b. Inspect and clean the unit as directed by the manufacturer's literature.	The scheduled maintenance cannot be completed. The unit is unsafe or hazardous.

6525-01-370-7552

Portable Dental X-Ray System, Model ALPHA MPDX

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**X-Ray System**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent the operation of the x-ray system.
		b. Inspect components for damage, discoloration, or excessively worn components.	Unserviceable components prevent the use of x-ray.
		c. Verify the date on the Medical Equipment Verification/Certification sticker (DD Form 2163) is current.	The unit has not been verified within the last 12 months.
2	B, D, A	**X-Ray System Operational Check Out**	
		a. Perform the “Assembly/Setup Procedure” as directed by the manufacturer’s literature.	The unit cannot be assembled.
		b. Inspection after assembly as directed by the manufacturer’s literature.	
		(1) Ensure that all quick release pins are fully inserted and locked in place.	
		(2) Ensure that all locking knobs are hand-tight (full clockwise position).	Knobs cannot be tightened sufficiently to prevent drift or to keep unit from falling.
		(3) Verify the security of the cone installed on the x-ray control assembly.	
		(4) Check security of all electrical connectors.	Loose connectors prevent the operation of the x-ray system.
		(5) Verify that all labels are securely affixed and legible.	
		(6) Thoroughly inspect the assembled x-ray system for tight fittings, possible missing parts (including the operation and maintenance manuals), frayed electrical cords, cracks, chips, excessive wear, or other signs of deterioration.	Loose fittings, missing parts, or frayed cords prevent operation of the x-ray system.
		(7) Using a lint-free cloth, remove any noticeable dirt or excess dust from the assembled unit.	
		(8) Check x-ray head subassembly 1A2A1 in all working positions for possible drift.	X-ray head drift prevents the operation of the x-ray system.
		(9) Check scissor arm assembly 1A3 in all working positions for ease of motion.	Scissor arm assembly is unable to hold position prevents the operation of the x-ray system.

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		c. Perform the pre-operational checkout procedure as directed by the manufacturer's literature.	
		(1) Check the line power plug connection to the line power receptacle.	Improper fit prevents the operation of the x-ray system.
		(2) Check security of the electrical connection between x-ray control assembly 1A1 and x-ray unit.	Improper fit prevents the operation of the x-ray system.
		(3) Cover the cone port with lead shielding.	
		(4) Position the tube head away from the x-ray unit mounting post (scissor arm assembly fully extended).	
		(5) Set the rotary "TIMER" switch to 0.1 second.	
		(6) While holding exposure switch, **STEP BACK FROM THE UNIT APPROXIMATELY SIX (6) FEET.**	
		(7) Depress and hold down the exposure switch. The x-ray Indicator light will illuminate and the buzzer will emit as audible tone. The exposure switch will automatically switch off when the time set on the "TIMER" switch expires.	The unit does not shut off.
		d. Perform routine cleaning as directed by the manufacturer's literature.	

(continued) Appendix A. Operator PMCS

6525-01-384-9296

X-Ray Apparatus, Model LCROKS

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, D, A	**X-Ray Apparatus**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components prevent the use of the x-ray.
		b. Inspect unit for damage, discoloration, or excessively worn components.	Unserviceable components prevent the use of x-ray.
		c. Verify that the Verification/Certification sticker (DD Form 2163) has a current date.	The unit has not been verified within the last 12 months.
2	B	**X-Ray Operational Test**	
		Conduct “Operator Maintenance” as directed by manufacturer’s literature.	
		a. Check control panel for nicks, scratches, and/or dents.	
		b. Ensure proper seating of APR labels.	
		c. Inspect unit for all warning labels, serial tags, UL, and CSA tags.	The labels are missing, unreadable, or outdated.

6525-01-422-6122

X-Ray Processor with Daylight Loader, Model MM190

[B-Before Operation, D-During Operation, A-After Operation, W-Weekly, M-Monthly, AN-Annually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**Processor System**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories list are on hand.	Missing components or accessories prevent the operation of the processor.
		b. Inspect components for damage, discoloration, or excessively worn components.	Unserviceable components prevent the use of the processor.
2	B	**Installation of the Processor**	
		a. Install the processor as directed by the manufacturer's literature.	
		NOTE: Do not unpack the processor until a thorough inspection of the shipping container for evidence of damage has been conducted.	
		b. Uncrate processor, daylight loader assembly, brackets, hardware, and replenisher supply tanks as directed by the manufacturer's literature.	
		c. Position processor case on a flat, level surface as directed by the manufacturer's literature.	
		(1) Position and level the processor on Packing Case Number 1 as directed by the manufacturer's literature.	The processor not being level prevents operation.
		(2) Inspect all components at this time for visible shipping damage.	
		(3) Inspect tank and racks for loose parts.	
		d. Conduct the processor assembly as directed by the manufacturer's literature.	
		e. Conduct the daylight loader assembly as directed by the manufacturer's literature.	Light leaks prevent operation of the processor.
		f. Conduct replenishment set up as directed by the manufacturer's literature.	
		NOTE: The processor may be set up to operate its replenishment system in either "Replenish" or "Batch" mode.	
		g. Connect wash water system and drain.	
		h. Conduct processor inspection before adding chemicals.	

[B-Before Operation, D-During Operation, A-After Operation, W-Weekly, M-Monthly, AN-Annually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		CAUTION: DO NOT POUR CHEMICALS INTO THE PROCESSOR TANKS UNTIL READING "Test Checkout With Water In Tank" IN THE MANUFACTURER'S LITERATURE.	
		i. Conduct the "Test Checkout With Water in Tank" procedure.	Rollers not moving smoothly, recirculation pumps are not operating, leakage to system, replenishment pumps not operating on demand, film feed system not operating, and/or developer temperature not correct.
		j. Conduct the "Transporting Film" procedure as directed by the manufacturer's literature.	
		(1) Check film feed switch operation.	The "WAIT" lamp does not stay on continuously, audible beeper does not sound, or processor does not stay on for approximately 4 minutes after the film feed switch is released.
		(2) Feed film in straight to check racks for drift or skewing.	The material does not feed though straight, it drifts, skews or wrinkles.
		(3) Check for operation of film dryer. Material processed in water alone may still be slightly tacky or damp when exiting the processor.	The dryer is not operating.
		k. Conduct the "Final Cleaning Before Operating" procedure.	
3	B	**Daily Start Up** a. Conduct "Processor ON, Fill Wash Tank" procedure as directed by manufacturer's literature.	
		CAUTION: ALWAYS INSPECT TO SEE THAT ALL DRAIN TUBES ARE PROPERLY POSITIONED AND DRAINING CORRECTLY. ALL TUBES MUST BE ROUTED IN A CONTINUOUSLY DOWNWARD DIRECTION, WITHOUT DIPS OR LOOPS THAT CAN CAUSE AIRLOCKS.	
		CAUTION: A KINK OR TWIST IN A DRAIN TUBE CAN CAUSE A SERIOUS CHEMICAL OR WATER SPILL IN THE PROCESSOR.	
		b. Conduct the "Check Developer and Fixer Levels" procedure as directed by manufacturer's literature.	

[B-Before Operation, D-During Operation, A-After Operation, W-Weekly, M-Monthly, AN-Annually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		c. Conduct the “Check Drive” procedure as directed by manufacturer's literature. d. Read or be familiar with the “Processing Film/Daylight Loader Operation” section in the manufacturer’s literature. e. Conduct the “Shutdown and Daily Cleaning” procedure as directed by manufacturer's literature. (1) Drain wash tank (2) Clean top cover, guides and rollers (3) Wipe off processor	
4	D	**Quality Control** a. Developer activity can be monitored by use of pre-exposed control strips or by carefully monitoring the production work. b. Monitor fixer solution for film problems. (1) Exhausted fixer will usually result in dark streaks in the film's emulsion that may appear immediately after processing or may not appear until hours or even days after processing. (2) Exhausted fixer can also contribute to transport problems such as jams and will frequently prevent proper drying from taking place, resulting in sticky film surfaces. **NOTE: The general quality of the fixer can be determined by monitoring the pH of the chemistry. When pH is too high, films may jam in the wash tank and the dryer.** c. Read and/or be familiar with the “Replenishment” section in the manufacturer’s literature.	
5	B	**Maintenance Program** a. Perform daily maintenance as directed by the manufacturer's literature. (1) Clean as directed by the manufacturer's literature. (a) Developer rollers (b) Top covers, side panels (c) Feed tray, receiving bin	

[B-Before Operation, D-During Operation, A-After Operation, W-Weekly, M-Monthly, AN-Annually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(2) Check as directed by the manufacturer's literature. (a) Chemical levels (b) Replenisher levels	
	W	b. Clean as directed by the manufacturer's literature (1) Developer rack (2) Fixer rack (3) Wash rack (4) Wash tank (5) Tank exteriors	
	M	c. Perform monthly maintenance as directed by the manufacturer's literature. **NOTE: The monthly maintenance schedule should be performed before disassembly for transport or storage.** (1) Clean as directed by the manufacturer's literature: (a) Developer tank, circulation and replenishment system. (b) Fixer tank, circulation and replenishment system. (c) Wash tank, drain and overflow system. (2) Check as directed by the manufacturer's literature: (a) Hose clamps and plumbing. (b) Rack bearings. (c) Lubrication points.	
	AN	d. Yearly or after long-term storage should be as directed by the manufacturer's literature. **NOTE: Read and/or be familiar with the “Special Maintenance Notes” and “Information for Long Term Storage and Inspection” sections in the manufacturer’s literature.** (1) Clean developer and fixer circulation pumps. (2) Check: (a) Drive belt. (b) Drive motor brushes. (c) Lubrication Points	

(continued) Appendix A. Operator PMCS

6530-00-926-2151

Sterilizer, Surgical Dressing 16X36 in., Model M-138

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, A	**Sterilizer**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	The shelves are missing.
		b. Inspect the unit for obvious signs of damage such as cracks, dents, leaks, or broken components.	Gasket is torn, sight-glass is broken, or legs cannot be locked into their supporting position.
2	B	**Sterilizer Operational Check**	
		a. Ensure that the unit is set up and assembled properly as directed by the manufacturer's literature.	The sterilizer cannot be assembled properly.
		b. Remove the chamber drain-plug and inspect for lint and sediment from the strainer.	Built-up sediment cannot be removed and prevents the chamber from draining.
		c. Inspect and clean the interior surfaces of the chamber, with mild detergent and water, before heating. Clean the shelves in the same manner.	Chamber does not hold pressure.
		CAUTION: DO NOT USE STEEL WOOL OR ABRASIVE CLEANERS.	
		d. Inspect door and door gasket	Door does not seal.
		e. Inspect sight glass for mineral deposits.	Sight glass is broken or mineral deposits obscure water level in sight glass.
		f. Inspect fill washer.	Fill washer is missing.
3	B, D	**Electrical Operations** Ensure that the frame of the sterilizer is adequately grounded before operating on electrical power as directed by the manufacturer's literature. Seek assistance from unit medical maintenance section if necessary.	Unit is not grounded.
4	B	**Sterilizer Jacket**	
		a. Turn operating valve to sterilize. This opens an escape route for trapped air.	
		b. Open drain valve to allow for a lower air escape route.	
		c. Fill jacket with water to about ½ mark.	Jacket cannot be filled with water.
		d. Close drain valve when water flows freely without burping.	
		e. Ensure that the water level viewed in the sight glass is at least at the ¼ mark as directed by the manufacturer's literature.	Jacket cannot be filled with water.

6530-00-926-2151

Sterilizer, Surgical Dressing 16X36 in., Model M-138

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		WARNING: LIFT THE RELIEF HANDLE OF THE SAFETY VALVE OR TURN OPERATING VALVE TO THE DRY POSITION TO RELEASE ANY PRESSURE IN THE JACKET BEFORE REMOVING THE PLUG FROM THE FILLING FUNNEL. FILL THE STERILIZER JACKET WITH THE PUREST WATER AVAILABLE AND INSPECT FOR WATER LEAKS. ENSURE THE WATER IN THE SIGHT GLASS IS AT LEAST AT THE ¼ MARK.	Jacket leaks or cannot be filled with water.
		f. Verify operation of the pressure control switch knob. Turn the pressure control knob to the maximum clockwise position.	Pressure control switch does not operate.
		g. Verify operation of the operating valve. Ensure that the operating valve is in the OFF position.	Operating valve does not function.
		h. Turn the heat switch on and verify that the red pilot light is glowing.	Heating elements do not energize.
		i. Turn pressure valve fully counterclockwise to open the low-pressure relief valve.	
		j. When pressure reaches 18 – 20 psi, the low-pressure valve should release pressure.	Safety valve does not activate.
		k. Turn pressure relief valve fully clockwise to take the low-pressure valve out of the system.	
		l. Verify the increase in pressure and test the safety valve by depressing the safety lever.	Safety valve does not activate.
		m. When pressure reaches 27 – 32 psi, the high-pressure valve should release pressure.	Safety valve does not activate.
		n. Verify that the pressure gauge indicates the desired pressure of 18 psi for 250 degrees F or 29 psi for 270 degrees F.	Desired steam pressure cannot be reached or pressure gauge is faulty.
		o. Turn the pressure control switch knob slowly counterclockwise until the pilot light goes out. Verify that the pressure control cycles and maintains the selected pressure.	

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		NOTE: A pre-heat period of 10 to 15 minutes is recommended to allow the pressure to stabilize. There are no markings or calibration on the pressure control switch since temperature is a function of absolute pressure rather than gauge pressure. Depending on altitude and atmospheric conditions, reaching 270° F may require between 27 and 32 psi gauge pressure. The pressure switch must be adjusted to the pressure, which will give the desired temperature.	Pressure control does not operate.
		p. Load the sterilizer and verify proper operation.	
		CAUTION: IN THE EVENT THAT WATER IN THE JACKET RUNS LOW, THE WATER CUT-OFF WILL INTERRUPT THE POWER SUPPLY TO THE HEATERS. IF THIS OCCURS, LIFT THE RELIEF HANDLE ON THE SAFETY VALVE TO RELEASE ANY PRESSURE IN THE JACKET BEFORE REMOVING PLUG FROM FILLING FUNNEL. WAIT UNTIL INTERNAL PARTS COOL BELOW THE BOILING POINT AND REFILL THE JACKET WITH WATER AND PRESS THE RESET BUTTON (LOCATED UNDER THE HEATER BOX). PROCEED WITH THE REGULAR OPERATING CYCLE FROM THE BEGINNING.	
		q. Close the chamber door.	Door does not seal.
		r. Turn the operating valve to sterilize.	
		s. Let the chamber pressurize.	
		t. Check for leaks. The steam trap may stick open (rap with a solid object to release it).	Chamber leaks or trap fails to close.
		u. Set the timer.	
		v. Check that the pilot light cycles on and off.	
		w. Check that the chamber maintains pressure.	Desired pressure cannot be maintained.
		x. When the timer goes off, turn the operating valve to “DRY.”	Sterilizer chamber does not release pressure.
		y. Check that the pressure goes to about –5 psi for about 15 minutes before the pressure releases and the door can be opened.	Sterilizer chamber does not pull a vacuum.

6530-00-926-2151

Sterilizer, Surgical Dressing 16X36 in., Model M-138

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
5	B, D	**Gasoline Heat** **Note: No longer authorized for Department of the Defense use.**	
6	B, D	**Direct Steam Operation**	
		a. Conduct direct steam operation as directed by TM 8-6530-004-24&P.	
		b. Load the sterilizer and verify proper operation.	Sterilizer does not operate.
		WARNING: TO PREVENT POSSIBLE INJURY TO PERSONNEL RESULTING FROM BURSTING BOTTLES AND HOT FLUID, USE ONLY BOROSILICATE (PYREX) FLASKS WITH VENTED CLOSURES FOR STERILIZING LIQUIDS.	

(continued) Appendix A. Operator PMCS

6530-01-327-0686
Ventilator, Volume, Portable, Model 750M

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, D, A	**Ventilator**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent the operation of the ventilator.
		b. Inspect hoses, fittings, and regulators for cracks, crimps, leakage, discoloration, damaged connector fittings, or general wear.	Unserviceable components prevent safe use of ventilator.
		c. Verify that the Verification/Certification sticker (DD Form 2163) has a current date.	The unit has not been verified within the last six (6) months.
2	S	**Case**	
		Inspect for wear, loose or missing hardware, and cracks.	The unserviceable case prevents protective storage or movement.
3	B, A	**Ventilator Operational Test**	
		Ensure that the unit is properly assembled, by performing the unpacking and assembly procedures in the manufacturer's literature.	The unit cannot be assembled.
		a. Multivoltage power supply	
		(1) Check the power supply for worn, cracked, or exposed electrical wires and connectors as directed by the manufacturer's literature.	The unit does not operate, or an electrical hazard exists.
		(2) Verify that the “External Power” indicator lamp illuminates when using an external power source as directed by the manufacturer's literature.	The multivoltage power supply is inoperable.
		b. Patient valve	
		Check for cracks, leakage, discoloration, and general wear as directed by the manufacturer's literature.	The patient valve is inoperable, malfunctioning, or endangers the patient.
		c. Control module	
		(1) Check for tactile feel and operation of all controls as directed by the manufacturer's literature.	Any control is inoperable.
		(2) Verify completion of self-test as directed by the manufacturer's literature.	Any portion of the self-test fails or aborts.
		(3) Verify transducer calibration as directed by the manufacturer's literature.	Transducer fails calibration test.

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(4) Verify the “Modes of Operation” as directed by the manufacturer's literature. (a) Verify the “Control Ventilation – With/Without SIGH – With/Without PEEP” as directed by the manufacturer's literature. (b) Verify the “Assist-Control Ventilation – With/Without SIGH – With/Without PEEP” as directed by the manufacturer's literature. (c) Verify the “Synchronized intermittent mandatory ventilation (SIMV) – With/Without SIGH – With/Without PEEP” as directed by the manufacturer's literature. (d) Verify the “Assist-Control Backup During Apnea – With/Without SIGH – With/Without PEEP” as directed by the manufacturer's literature.	Ventilator fails to operate in any mode of operation.
		d. Battery (1) Test the control module for proper operation using the internal battery as directed by the manufacturer's literature. (2) Check for a battery alarm condition as directed by the manufacturer's literature.	 The discharged battery causes an alarm condition. The discharged battery causes an alarm condition.

(continued) Appendix A. Operator PMCS

6530-01-374-8903
Portable Ventilator, Model 15304

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**Ventilator**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components and accessories prevent the operation of the ventilator.
		b. Inspect hoses, fittings, and regulators for cracks, crimps, leakage, discoloration, damaged connector fittings, or excessive wear and tear.	Unserviceable components and accessories prevent the use of the ventilator.
		c. Verify that the Medical Equipment Verification/Certification sticker (DD Form 2163) has a current date.	The unit has not been verified within the last six (6) months.
2	B, A	**Case**	
		Inspect for wear, loose or missing hardware, and cracks.	The unserviceable case prevents the protective storage or movement.
3	B, A	**Ventilator Operational Test**	
		NOTE: Before using the Bird Avian Portable Ventilator, the user should read and understand all warnings and cautions in manufacturer's literature.	
		a. Ensure the unit is properly assembled, as directed by the manufacturer's literature.	Missing components and accessories prevent the operation of the ventilator.
		b. Conduct the performance check as directed by the manufacturer's literature.	The ventilator fails the performance check.
		(1) Conduct the internal self test as directed by the manufacturer's literature.	The self-test detects a failure, and a CPU failure alarm activates.
		(2) Set up the unit using the “Test Settings.”	
		(3) Conduct the tests as directed by the manufacturer's literature.	
		(a) Set “PEEP Valve” to 10 cm H_2O.	The test does not continue at 12 bpm.
		(b) Press “P_{aw}” button to display the airway pressure.	The airway pressure drops more than 5 cm H_2O over a 20-second period.
		(c) Set the Breath Rate to 12 bpm.	The unit does not return to a 12 bpm breath rate.
		(4) Conduct the “Alarm Test Procedures” as directed by the manufacturer's literature.	

6530-01-374-8903
Portable Ventilator, Model 15304

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(a) Using an external power supply, disconnect the power cord from the electrical outlet.	The audible/visual “External Power Low/Fail” alarm does not activate or the ventilator does not continue to operate using the internal battery.
		(b) Reconnect the power supply cord to the electrical outlet to deactivate alarm.	
		(c) Lower the “High Pressure Alarm” setting to 5 cm H_2O below the “PIP” reading.	The audible and visual “High Peak Pressure” alarms do not activate or the inspiration does not terminate.
		(d) Disconnect the test lung from the patient valve.	The audible and visual “Low Pressure” or “Disconnect” alarms do not activate.
		(e) Adjust the “Inspiratory Time/Tidal Volume” control to the maximum setting of 3.0 seconds.	The audible and visual “I:E Ratio” alarms do not activate immediately.
		(f) Adjust the mode control to the “Assist/Control Mode.”	After a 20-second interval has elapsed, the audible and visual “Apnea Backup” alarms do not activate or the unit does not deliver a “Controlled” breath.
		(g) With the “Mode” control at the “Assist/Control” setting, adjust the “Manual PEEP Reference” control to zero. Adjust the removable “PEEP” valve at the patient valve to 5 cm H_2O.	The audible and visual “PEEP Not Set” alarms do not activate.

6630-01-300-8711
Analyzer, Sodium Potassium, Model 614

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**Analyzer, Sodium Potassium**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing or expired components or accessories prevent operation of the analyzer.
		b. Inspect the unit for dust, dirt, or damage. Refer to the operation description of controls, circuit breaker, connector, and indicators in the manufacturer's literature and ensure all are operational.	Damage or deteriorated components prevent the operation of the unit.
		c. Verify that the Medical Equipment Verification/Certification label (DD Form 2163) has a current date.	The unit has not been verified within the last six (6) months.
2	B	**Installation**	
		a. Position the analyzer on a level bench—away from direct sunlight and drafts. The operating temperature range is between 10° C and 35° C (50° F and 95° F). The analyzer needs approximately 450 x 450 mm (18 x 18 in) of bench space.	The unit cannot be positioned to meet the required parameters.
		b. Conduct the following steps as directed in the manufacturer's service manual:	
		(1) Install the Na+ and K+ electrodes.	The electrodes are expired or cannot be installed in unit.
		(2) Install the reference electrode.	The electrodes are expired or cannot be installed in unit.
		(3) Perform the "Tensioning the Pump Tube Cassette" procedure.	The pump tube cassette is loose or damaged.
		(4) Install the reagents.	The reagents are expired or cannot be installed in unit.
		(5) Perform the "Fitting the Printer Ribbon Cassette" procedure.	The ribbon cassette will not install.
		(6) Perform the "Selecting Voltage" procedure.	The proper voltage cannot be selected.
		(7) Position the "Operator's Guide" to the right of the analyzer.	
3	B	**Power Up Routine**	
		Verify the following steps as directed by the manufacturer's "Instruction Manual":	

6630-01-300-8711
Analyzer, Sodium Potassium, Model 614

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		a. Power up unit.	The line cord is damaged or missing. The voltage selector will not change, is damaged, or is missing fuses. The unit does not power on or characters do not appear in display.
		NOTE: If the power has been disconnected for less than 30 minutes, the analyzer will retain all previously selected data settings. The instrument will standardize and display "ANALYZE BLOOD?"—Refer to menu routing map in the manufacturer's literature.	
		b. Select "Language."	Unable to select language.
		c. Set "Date and Time."	Unable to set time and date.
		d. Select "Analysis."	Unable to select choice of measurement channels.
		e. Perform "Correlation Adjust."	Unable to change the correlation.
		f. Set "Reference Ranges."	Unable to set reference ranges.
		g. Set "QC Prompts."	Unable to set QC prompts.
		h. Set "QC Limits."	Unable to set QC limits.
		i. Set the "Standardization Mode."	Unable to set the calibration mode.
		j. Set the "Print Option."	Unable to set the print mode.
		k. Set the "Security Option."	Unable to set the security options.
		l. Perform the "Conditioning Routine."	Unable to condition analyzer.
4	B	**Operating Instructions** Conduct the operation of the unit as directed by the "Instruction Manual."	Any of the operations cannot be performed.

6630-01-300-8711
Analyzer, Sodium Potassium, Model 614

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		a. Verify proper menu routing as directed in the instruction manual. b. Measure a blood, serum or plasma sample as directed in the instruction manual. c. Measure a urine sample as directed in the instruction manual. d. Measure or flush a sample containing a bubble as directed in the instruction manual. e. Manually standardize the unit as directed in the instruction manual. f. Recall the last result as directed in the instruction manual. g. Measure a QC sample as directed in the instruction manual. h. Shutdown the unit as directed in the instruction manual.	Unable to select all modes of operation.
5	B	**Precautions and Hazards** a. Verify the operating precautions as directed by the manufacturer's instruction manual. b. Avoid the hazards cited in the manufacturer's instruction manual. c. Conduct the sample handling and collection procedures as directed in the instruction manual.	
6	B, Q	**Maintenance** a. Conduct the "Check/Service Menu Map" procedure as directed by the manufacturer's instruction manual. b. Conduct general maintenance and cleaning as directed by the manufacturer's instruction manual. c. Conduct scheduled maintenance as directed by the manufacturer's instruction manual.	Unable to access a mode or verify an operation.
	B	(1) Daily Maintenance:	

6630-01-300-8711
Analyzer, Sodium Potassium, Model 614

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(a) Check levels of calibrants and replace with new “Cal-Pak” if necessary. “Cal-Pak” will probably need replacing once a week.	Unable to replace calibrants, damaged or missing components.
		(b) Check that the probe is straight and centered over the weir when in the closed position.	Unable to realign or replace.
		(c) Wipe the sample area, calibrant compartment and the external surfaces with clean tissues moistened with 2% activated glutaraldehyde solution.	
		(d) Clean the weir cover with clean tissues moistened with 2% activated glutaraldehyde solution.	
	Q	(2) Three monthly (quarterly) maintenance:	
		(a) Disinfect the unit as directed by the manufacturer’s instruction manual.	
		(b) Replace the weir cover, if necessary, as directed by the manufacturer’s instruction	
		(c) Replace the pump tube cassette, and clean and lubricate the roller assembly as directed by the manufacturer’s instruction manual.	
		(d) Replace the reference electrode cassette (not the inner electrode) as directed by the manufacturer’s instruction manual.	
		(e) Check Na+ and K+ electrode fill solution and refill the electrodes, if necessary, as directed by the manufacturer’s instruction manual.	

(continued) Appendix A. Operator PMCS

6630-01-316-5085
Centrifugal Hematology Analyzer System with
QBC II Reader, Model 4477 and QBC Centrifuge, Model 4207

B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	**B**	**Centrifugal Hematology Analyzer System**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent the operation of the unit.
		b. Inspect each unit for dust, dirt, or damage. Refer to the “Operation Description” of controls, circuit breaker, connector and indicators in the manufacturer’s literature and ensure all are operational. Inspect the collection canister for damage.	Damage or deteriorated components prevent operation of the unit.
		c. Verify the Medical Equipment Verification / Certification sticker (DD Form 2163) has a current date.	The sticker is missing and/or date is not current.
2	**B**	**Installation Procedures and Special Requirements.**	
		Perform installation procedures in accordance with manufacturer’s literature.	The unit cannot be installed in accordance with manufacturer’s literature.
3	**B, D**	**Operational Check Out**	
		a. Perform “Reader self-test sequence” procedures in accordance with manufacturer’s literature.	The unit fails to perform in accordance with operator’s literature.
		b. Reader start-up procedures. Perform installation procedures in accordance with manufacturer’s literature.	The unit fails to perform in accordance with operator’s literature.
		c. Perform “Centrifuge cleaning” procedures in accordance with manufacturer’s literature.	The unit fails to perform in accordance with operator’s literature.
		d. Perform “Visual Inspection” procedures in accordance with manufacturer’s literature.	The unit fails to perform in accordance with operator’s literature.
		e. Perform “Timer Accuracy” check in accordance with manufacturer’s literature.	The unit fails to perform in accordance with operator’s literature.
4	**B**	**Daily Calibration Checks, QBC II**	
		Perform daily calibration checks as directed in the manufacturer’s literature.	Unable to complete or unit fails the daily calibration checks.

6630-01-364-8555
Analyzer, Blood Gas, Model 4300M

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, A	**Analyzer, Blood Gas (GEM Stat)**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent the operation of the unit.
		b. Inspect the unit for any damage, discoloration, or excessively worn components.	Unserviceable components prevent the use of the unit.
		c. Verify that the Medical Equipment Verification/Certification label (DD Form 2163) has a current date.	The unit has not been verified within the last 12 months.
2	B	**Preparation and Operational Check Out**	
		a. Perform the following procedures to prepare the blood gas analyzer for operation as indicated in the manufacturer's literature:	The unit fails to perform correctly.
		(1) Preparing the GEM Stat for operation.	
		(2) Inspecting GEM Stat components.	
		(3) Installing printer paper.	
		(4) Summary of operation.	
		(5) Setting the time and date.	
		(6) Setting the other GEM Stat options.	
		(7) Inserting the GEM Stat.	
		b. Perform the following procedures to verify the analyzer's performance as indicated in the manufacturer's literature:	The unit fails to perform correctly or fails calibration.
		(1) Check the analyzer's performance.	
		(2) Calibrate.	
		(a) Detecting calibration failures	
		(b) Correcting calibration failures	
		(c) Checking value limit	
		(3) Ensure quality control.	
		(a) QC frequency	
		[1] State QC requirements	
		[2] Federal QC requirements	

(continued) Appendix A. Operator PMCS

6630-01-364-8555
Analyzer, Blood Gas, Model 4300M

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(b) Verifying analyzer's performance (c) Interpreting the QC results	
3	B	**Operation** Conduct the operating procedures as directed by the Operator's Manual and Comprehensive Service Manual. a. Running a sample. (1) Collect the blood sample. (2) Analyze the sample. b. Retrieving Information. (1) Duplicate the printout of the last sample. (2) Determine cartridge status. (3) Print all samples run on a cartridge. (4) Print all quality control samples run on a cartridge. (5) Print all samples run on one day on a cartridge. (6) Print the most recent calibration statistics. (7) Printing All Calibration Statistics for a Cartridge c. Using other Gem Stat functions (1) Enter and Exit standby mode (2) Initiate a two-point calibration (3) Remove the Gem Stat "Pak" cartridge (4) Turn the Gem Stat off	
4	B, A	**Maintenance** Conduct the Gem Stat maintenance and storage as directed by the manufacturer's operator's manual.	

6630-01-364-8555
Analyzer, Blood Gas, Model 4300M

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		a. Clean the instrument.	Any indication of leakage in the sensor heater block.
		b. Clean or change the filter.	The filter is missing or unserviceable.
		c. Store the Gem Stat.	

(continued) Appendix A. Operator PMCS

6630-01-376-9823
Analyzer, Clinical Chemistry, Model DT60

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B	**Analyzer, Clinical Chemistry**	
		a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent the operation of the unit.
		b. Inspect the unit for damage, discoloration, or excessively worn components.	Unserviceable components prevent the use of the unit.
		c. Verify that the Verification/Certification sticker (DD Form 2163) has a current date.	The unit has not been verified within the last six (6) months.
2	B, D	**Installation**	
		a. Set up equipment as directed by the manufacturer's literature.	
		b. Check power source and plug the analyzer in as directed by the manufacturer's literature.	
3	B, D	**Operating Instructions**	
		a. Perform startup procedures as directed by the manufacturer's operator's manual.	The unit cannot be assembled or will not start up properly.
		b. Perform testing procedure as directed by the manufacturer's operator's manual.	
		(1) Conduct "Pipetting Techniques" as directed by the operator's manual.	
		(2) Perform the "Steps for Analysis on the Vitros DT II System" as directed.	
		c. Perform the "Calibration Data Module and Chemistry Language Module" as directed by the operator's manual.	
		d. Perform the normal shutdown procedure as directed by the operator's manual.	
		(1) Check incubator for tests in progress.	
		(2) Turn analyzer off.	
		NOTE: Conducting an EMERGENCY SHUTDOWN will result in having to repeat the analysis for all tests that remained in the incubator at the time of the shutdown.	

6630-01-376-9823
Analyzer, Clinical Chemistry, Model DT60

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
4	B, D	**Calibration** **NOTE: Periodic calibration of the DT60 II System is required to maintain instrument reliability (per operator's manual).** a. Follow the "When to Calibrate" instructions as directed by the operator's manual. (1) Calibrate the analyzer for all tests: (a) When the analyzer is initially installed. (b) At least once every six months. (c) When the technician indicates that calibration is necessary, e.g., servicing procedures might have affected the validity of the stored calibration parameters. (2) Calibrate the analyzer for individual tests: (a) When the lot number of the Vitros DT slides change. (b) When the results of a quality control test using Vitros DT controls, Vitros DT Hb control sets, or Vitros DT isoenzyme controls are consistently outside an acceptable range. (c) When a new lot of Vitros DT reference fluid is used. (This requires recalibration of tests run on the DTE module only.) **NOTE: Refer to "Log Sheets" in the operator's manual for a sample of calibration log sheets to record data.** b. Perform the "How to Calibrate" procedures according to operator's manual. (1) Preparing the Vitros DT calibrators. (2) Preparing the Vitros DT Hb calibrators. (3) Entering the Calibration Mode.	Results are out of range, calibrator fluids are expired, results are inaccurate, or error code/message is displayed. Results are out of range, calibrator fluids are expired, results are inaccurate, or error code/message is displayed.

6630-01-376-9823
Analyzer, Clinical Chemistry, Model DT60

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		c. Perform the calibration procedure as directed by the manufacturer's operator's manual. (1) Warm the slides and calibrator fluids to room temperature. (2) Do not interchange calibrators and diluents. (3) For tests run on the DTE Module, it is recommended that you run each bottle twice. (4) Examine printout results. (5) Run a quality control test to verify calibration.	Results are out of range, calibrator fluids are expired, results are inaccurate, or error code/message is displayed.
5	B, D, A	**Instrument Care and Cleaning** a. Perform daily cleaning as directed by the manufacturer's operator's manual. (1) Slide disposal box(es). (2) Pipettes. b. Perform weekly cleaning as directed by the operator's manual. (1) Cleaning the DT60 II system (a) Pipette locator and visible slide track area. (b) Bar code reader and drop detector surfaces. (2) Cleaning the DTE II module (a) Pipette locator and visible slide track area. (b) Rubber boot on the front of the electrometer. (3) Cleaning the DTSC II module (a) Pickup and slide spotting stations. (b) Slide track. (c) Pipette locator. (d) White reference cap and sapphire read window. c. Clean the pipette as directed by the operator's manual. d. Charge the DT Pipette as directed by the operator's manual.	The battery will not charge.

6630-01-376-9823
Analyzer, Clinical Chemistry, Model DT60

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		CAUTION: NEVER LEAVE THE CHARGER CONNECTED TO THE DT PIPETTE FOR MORE THAN 72 HOURS. e. Perform other cleaning as directed by the manufacturer's operator's manual: "Vitros DT60 II Chemistry System FORS Head."	

(continued) Appendix A. Operator PMCS

6630-01-526-7373
Analyzer, Urine Chemistry, Model Clinitek 500

B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, S	**Analyzer** a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing parts or accessories preclude operation of the analyzer.
		b. Check the electrical power cord for cuts, fraying, or deterioration.	The power cord is cracked or frayed, wires are not covered by the cord insulation, or the damage prevents the analyzer from operating.
		c. Perform “Start-up” procedures in accordance with operating instructions.	Analyzer fails to start-up.
2	B,S	**Display**	The monitor does not operate.
3	B,A,S	**Push Bar** Clean with alcohol and lubricate with multi-purpose grease.	Push bar does not reach the far right end of its travel.
4		**Fixed Table**	Does not activated to move the reagent strip into the read head area
5	B,A,S	**Touch screen display**	Does not activate.
6	B	**Printer**	Does not print.
		Ensure “Equipment Care” is conducted as directed by the manufacturer’s literature.	

6540-00-116-5780

Edging Machine Ophthalmic Lens, Model Horizon II

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
1	B, A	**Edging Machine** a. Conduct an inventory to ensure that the items listed on the Equipment Parts and Accessories List are on hand.	Missing components or accessories prevent the operation of the edging machine.
		b. Inspect components for damage, discoloration, or excessively worn components.	Unserviceable components prevent the use of the edging machine.
2	B	**Installation Procedures** **NOTE: These procedures should be followed in sequence, as the proper completion of a given step may depend on the one previous to it.** a. Prepare the bench as directed by the manufacturer's literature. b. Unpack the edger and vacuum as directed by the manufacturer's literature. c. Remove the carriage bolts as directed by the manufacturer's literature. d. Attach the vacuum system as directed by the manufacturer's literature. e. Attach the compressed air line as directed by the manufacturer's literature. f. Make the electrical connection and checks as directed by the manufacturer's literature.	
3	B	**Periodic Maintenance** **NOTE: Be familiar with the control panel as directed by the manufacturer's literature.** a. Daily maintenance: (1) Clean the interior as directed by the manufacturer's literature. (2) Drain the air filter as directed by the manufacturer's literature. (3) Check the air pressure as directed by the manufacturer's literature. (4) Check the Teflon ring as directed by the manufacturer's literature.	

6540-00-116-5780

Edging Machine Ophthalmic Lens, Model Horizon II

[B-Before Operation, D-During Operation, A-After Operation, Q-Quarterly, and S-Semiannually]

ITEM NO	INTERVAL	ITEM TO BE INSPECTED AND PROCEDURE	IS NOT MISSION CAPABLE IF:
		(5) Check the height of the bevel guide wheel as directed by the manufacturer's Literature. (6) Check the o-ring in the lens clamp as directed by the manufacturer's literature. b. Every 300 to 500 cycles change the vacuum bags as directed by the manufacturer's literature. c. Every 500 edges change the cutter inserts as directed by the manufacturer's literature. d. Every two weeks clean the cutter motor as directed by the manufacturer's literature. e. Monthly inspect the cutter motor brushes for wear as directed by the manufacturer's literature f. Every 2500 edges or 30 days, which ever comes first, inspect both the lens and pattern clamp assemblies for wear as directed by the manufacturer's literature.	